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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
10/027,343	12/19/2001	Tony Looper	VM6117	9618
7590	11/02/2004		EXAMINER VRETTAKOS, PETER J	
Kim Diliberti 1430 Waukegan Road McGaw Park, IL 60085			ART UNIT 3739	PAPER NUMBER

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,343

Applicant(s)

LOOPER ET AL.

Examiner

Peter J Vrettakos

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3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43-84 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43-84 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 43-84 are pending.

This action is final.

Note: the rejections below are the same as in the prior Office Action dated 3-12-04. The reader is advised to jump to the ***Response to Arguments*** section, which follows the rejections.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 43-84 are rejected under 35 U.S.C. 102(b) as being anticipated by Freitas et al. (5,486,185).

Independent claims 43, 50, 51, 61, 66, 71, and dependent claims 44, 53

Freitas discloses a reconfigurable surgical apparatus (figure 4), comprising:

a surgical instrument assembly / “means for imparting a range of motion” (100) formed with a hollow manipulation shaft / “means for defining an intracorporeal passageway” (112) internally receiving a prime mover (104) activated by an actuator/ (140) located at a proximal end of the shaft;

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a coupler (see figure 7) including a receiver/engager (106 and 108 combined) formed about a distal end having a capture ledge (106) and shelf (108) that defines a lateral slot (space between 106 and 110 depicted in figure 7); and

an interchangeable surgical tool (20; 200, figure 8) attachable to the coupler and including a frangible portion (proximal end of 200), and an anchor (212) having a shear notch adapted to non-releasably mate to the capture ledge/receiver/engager and capable of transferring rotational force from the prime mover to the tool (col. 2:18-20).

Note: "internally receiving" is construed as a shaft that envelops a tube, such as Freitas' shaft (112) enveloping the tubular probe (104).

Independent claims 52,57,78 and dependent claims 58, 79

Freitas discloses a reconfigurable surgical apparatus (figure 4), comprising:

a surgical instrument assembly (100) formed with a hollow manipulation shaft (112) internally receiving a prime mover (104) activated by an actuator (140) located at a proximal end of the shaft;

a coupler (see figure 7) formed about a distal end having a anchor (106) having an engagement face (inherent) that defines a lateral slot (between 106 and 110 depicted in figure 7); and

an interchangeable surgical tool (20; 200, figure 8; last sentence of Abstract) attachable to the coupler, and a capture ledge (212,122) that defines a lateral slot/recess (122) adapted to mate to the anchor (106) and capable of transferring rotational force from the prime mover to the tool (col. 2:18-20).

Dependent claims

Re: claims 45, 54, 55, 59, 60, 62, 63, 67, 68, 72, 73, 74, 80, and 81, Freitas discloses an anchor formed with two generally hook shaped tines/recess/projection (figure 8, formed by projections 212) with engagement faces (214).

Re: claims 46-48, 63-65, 69-70, 75-76, and 82-84, Freitas discloses tines with frangible portions, inherently that is sealed from the exterior environment by the coupler and the manipulation shaft as depicted in figure 4. Frangible is simply defined as "breakable". Of course the proximal section of element 200 in figure 8 is breakable.

Note: the application's claims are replete with terms such as "tines", "recesses", "slots", "projections", and "hooks". However, the contexts in which the terms are used in the claims cause their meanings to be generic and synonymous. For example, a "tine" can be defined as prongs extending from an implement. A "projection" can also be defined as a prong extending from an implement. In this light, the rejection above includes claims that use both the term "projection" and "tine". Further, the hooks depicted in figure 8 that form a T channel inherently include recesses (small hollow; part of the channel) and slots (narrow openings between elements 214). **To resolve these issues, more definitive language should be introduced into the claims.**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 45, 54, 55, 59, 60, 62, 63, 67, 68, 72, 73, 74, 80, and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freitas.

In addition to the **35 USC § 102** rejections above, the Examiner asserts that even though words such as "tines", "recesses", "slots", "projections", and "hooks" are not **expressly** disclosed in Freitas, it would have been obvious to one of ordinary skill in the art at the time of the invention that the use of a coupler having a lateral slot or hook shaped tine as in the claims represents an unpatentable design choice over the coupler of Freitas that would not change the functionality of the device.

3. Claims 46-48, 63-65, 69-70, 75-76, and 82-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freitas in view of Chien (GB 2227412A).

Freitas does not **expressly** disclose a "frangible portion".

Chien discloses a surgical instrument having a notched frangible portion (3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include a frangible portion such as the notched portion in Chien to the device of Freitas to ensure that the interchangeable tool of the device is not used again after it is removed from the coupler.

Response to Arguments

Applicant's arguments filed 8-11-04 have been fully considered but they are not persuasive. The independent claims have been amended to include a surgical tool adapted ***to cooperate with*** a coupler. The Office respectfully asserts that this amendment does not substantively change the claimed invention. Two *cooperating* elements are equivalent to two *mating* elements. Before the 8-11-04 Amendment, the independent claims disclosed *mating* elements (surgical tool and coupler). As a result, the rejections above are identical to that in the prior Office Action dated 3-12-04. Need be, the Applicant is invited to call Examiner Vrettakos at 703-605-0215 for assistance/clarification.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Vrettakos whose telephone number is 703 605 0215. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C Dvorak can be reached on 703 308 0994. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pete Vrettakos
October 28, 2004



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